

Location *Hondulu → 21-00N; 158°-10W*
Observer _____ Date *5 July 1966* Time *1655* to *1915*
Weather *seas rough, swells 4', clear* Miles _____ Hours *2 hrs 20 min*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	<i>114</i>	<i>1 int. phase, 1 dark phase, rest light</i>
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel	<i>3</i>	
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	<i>4</i>	
Great Frigatebird	<i>1</i>	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	<i>235</i>	
Gray-backed Tern		<i>Shear-Pet = 117</i>
Common Noddy Tern	<i>46</i>	<i>Tern = 249</i>
Fairy Tern		<i>Booby = 4</i>
Pomarine Jaeger		<i>Frigate = 1</i>
		<i>Misc. = 202</i>
<i>Haw. Noddy</i>	<i>1</i>	
<i>Tern sp</i>	<i>2</i>	
<i>Birds sp</i>	<i>202</i>	
		Total Birds <i>608</i>
		Total Sightings <i>feeding flocks 2 (315)</i>
		Total Flocks <i>11 (432)</i>
		Total Species <i>7</i>

Location 19-40N; 159-27W → 17-54N; 160-53W
Observer _____ Date 6 July 1966 Time 0505 to 1823
Weather Squalls, swells 6' Miles _____ Hours 13hrs. 18min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	40	3 dark phase
Sooty Shearwater	}	2 dark underwing - prob. S.L.
Slender-billed Shearwater		
Christmas Island Shearwater	1	
Newell's Shearwater	12	
Juan Fernandez Petrel	17	
White-necked Petrel	5	
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel	1	
Black-winged Petrel	5	
Bulwer's Petrel	1	
Leach's Storm Petrel		
Red-tailed Tropicbird	5	
White-tailed Tropicbird	7	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	87	
Gray-backed Tern		
Common Noddy Tern	4	
Fairy Tern		
Pomarine Jaeger		
Dark-rumped Petrel	3	Shear-Pet = 119
Pterodroma hypoleuca	12	Tern = 91
Pterodroma sp.	11	Tropicbird = 14
Shear-Pet	8	
Tropicbird sp	2	
		Total Birds 224
		Total Sightings
		Total Flocks 3 (80)
		Total Species 12

Location 16-26N; 162-13W → 14-43N; 163-44W
 Observer _____ Date 7 July 1966 Time 0521 to 1826
 Weather Overcast, seas rough 6's well Miles _____ Hours 13hrs 7min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	28	12 light, 16 dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater	1	
Newell's Shearwater		
Juan Fernandez Petrel	15	2 coll.
White-necked Petrel	2	
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	5	
White-tailed Tropicbird	1	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	45	
Gray-backed Tern		
Common Noddy Tern		Shear-Pet = 64
Fairy Tern	3	Tern = 51
Pomarine Jaeger		Tropic bird = 6
		Miss. = 20
<i>Pterodroma</i> Sp	7	
<i>Pterodroma hypoleuca</i>	1	
Tern Sp.	3	
Bird sp	20	
Shear-Pet	1	
		Total Birds 141
		Total Sightings
		Total Flocks 5 (85)
		Total Species 8

Location 13-13N; 165-04W → 11-36N; 166-25W
 Observer _____ Date 8 July 1966 Time 0538 to 1835
 Weather clear, windy, swells 6' Miles _____ Hours 12 hrs 57 min.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	43	42 dark, 1 light
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	13	coll. 1
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	22	coll-1
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	140	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	1	
Pomarine Jaeger		
Shear-Pet	4	Tern = 142 Shear-Pet. = 95 Tropicbird = 1
Pterodroma sp	8	
Pterodroma hypoleuca	5	
Tern sp.	1	
		Total Birds 238
		Total Sightings
		Total Flocks 5 (188)
		Total Species 6

Location 9-58N; 168-04W → 8-20N; 169-43W
 Observer _____ Date 9 July 1966 Time 0851 to 1840
 Weather Clear, mod. rough seas Miles _____ Hours 12 hrs. 49 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	561	6 light phase, 555 dark (3 coll.)
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater	1	
Juan Fernandez Petrel	5	
White-necked Petrel	1	
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	4	
Bulwer's Petrel	1	
Leach's Storm Petrel		
Red-tailed Tropicbird	3	1 ad coll.
White-tailed Tropicbird	1	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	24	1 imm. coll.
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	3	
Pomarine Jaeger		
Solander's Petrel?	1	Shear-Pet = 578
Pterodroma sp.	2	Tern = 27
Tropicbird sp.	1	Tropicbird = 5
Shear-Pet.	2	
		Total Birds 610
		Total Sightings
		Total Flocks 5 (548)
		Total Species 10

Location 6-51N; 170-58W → 5-20N; 172-24W
 Observer _____ Date 10 July 1966 Time 0615 to 1847
 Weather _____ Miles _____ Hours 12hrs 32min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	<u>45</u>	<u>21 light phase, 43 dark (2 coll.)</u>
Sooty Shearwater		
Slender-billed Shearwater	<u>1</u>	
Christmas Island Shearwater		
Newell's Shearwater	<u>6</u>	<u>1 coll.</u>
Juan Fernandez Petrel	<u>6</u>	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel	<u>1</u>	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	<u>26</u>	<u>1 coll</u>
Bulwer's Petrel	<u>5</u>	
Leach's Storm Petrel		
Red-tailed Tropicbird	<u>1</u>	
White-tailed Tropicbird	<u>1</u>	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	<u>12</u>	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	<u>2</u>	
Pomarine Jaeger		
		<u>shear - pet = 92</u>
<u>Pterodroma sp</u>	<u>2</u>	<u>Tern = 14</u>
<u>frigate sp</u>	<u>1</u>	<u>Tropicbird = 3</u>
<u>Tropicbird sp</u>	<u>1</u>	<u>Frigate = 1</u>
<u>Bird sp</u>	<u>8</u>	<u>Misc. = 8</u>
		Total Birds <u>118</u>
		Total Sightings
		Total Flocks <u>4 (56)</u>
		Total Species <u>12</u>

Nocturnal

Location 2-24N; 175-12W → 0-51N; 176-45W
 Observer _____ Date 11-12 July 66 Time 1854 to 0647
 Weather Vain squalls - sea calm Miles _____ Hours 1/hrs 53min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	2	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel	1	
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird	5	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird <i>SP</i>	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	47	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Shear-Pet = 4
		Tern = 47
Shear-Pet	1	Tropicbird = 5
Bird sp.	4	Frigate = 1
		Misc = 4
		Total Birds 61
		Total Sightings
		Total Flocks 2 (29)
		Total Species 5

1st day in Grid

Location Howland to Baker To Howland

Observer

Weather

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	17	
Brown Booby	5	1 blue streamer
Red-footed Booby	2	
Great Frigatebird sp.	57	
Lesser Frigatebird	6	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	2244	Shear-Pet = 1
Gray-backed Tern		Tern = 2256
Common Noddy Tern	12	Booby = 24
Fairy Tern		Frigate = 63
Pomarine Jaeger		
		Total Birds 2344
		Total Sightings
		Total Flocks 30 (2058)
		Total Species 7

2nd day in Grid

Location Howland to 1-04N; 178-05W

Observer

Date 13 July 1966 Time 0800 to 1903

Weather

Miles

Hours 11hrs 03min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	39	all dark 3 coll.
Sooty Shearwater	}	prob. S-b.
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / Tahitian	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
Leach's Storm Petrel	3	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby	51	3 blue Streamers
Brown Booby		
Red-footed Booby	7	
Great Frigatebird	2	
Lesser Frigatebird	17	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	485	4 coll. 1 banded 793-48145 Haw. Feb. 65
Gray-backed Tern		
Common Noddy Tern	1	Storm Petrel = 3
Fairy Tern		Shear-Pet = 44
Pomarine Jaeger		Tern = 542
Pterodroma sp	2	Tropicbird = 1
frigate sp.	60	Booby = 58
Shorebird sp	2	Frigatebird = 79
Tern sp.	56	shorebird = 2
		Total Birds 729
		Total Sightings
		Total Flocks 11 (624)
		Total Species 13

Nocturnal

Location 1-04N; 178-05W → Howland

Observer

Date 13-14 July

Time 1903 to 0630

Weather

Miles 97

Hours 11 hrs 27 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	2	
Brown Booby	1	
Red-footed Booby		
Great Frigatebird <i>sp</i>	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	117	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Tern = 117
		Booby = 3
<i>Pterodroma sp.</i>	2	Frigate = 1
<i>Shorebird sp.</i>	1	Shear-Pet = 3
		Shorebird = 1
		Total Birds 125
		Total Sightings
		Total Flocks 7 (55)
		Total Species 6+

3rd day in Grid

Location Howland → 01°36'N; 177-15W

Observer

Date 14 July

Time 0800 to 1901

Weather

Miles 102

Hours 1 hrs 01 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	4	dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	58	49 ad, 4 imm 1 blue streamer ad
Brown Booby	1	ad
Red-footed Booby	15	5 ad 10 imm
Great Frigatebird sp	43	
Lesser Frigatebird	13	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	728	Ad 2 blue streamered 2 coll
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Wandering Tattler	1	
Pterodroma sp	2	
Shear-Pet	1	
Bird sp.	1	
		Storm Petrel = 1
		Shear-Pet = 16
		Tern = 728
		Booby = 74
		Frigate = 56
		Shorebird = 1
		Misc. = 1
		Total Birds 877
		Total Sightings
		Total Flocks 10 (745)
		Total Species

3rd. Nocturnal

Location 01-56N; 177-15W $\longrightarrow$ Howland

Date 14/15 July

Time 1901 to 0630

Miles 89

Hours 11 hrs 29 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	1 coll. dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	2	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	1	
Brown Booby		
Red-footed Booby		
Great Frigatebird sp	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	755	2 imm
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Terns = 755
		shear-pet = 3
		frigate = 1
		booby = 1
		Total Birds 760
		Total Sightings
		Total Flocks 10 (706)
		Total Species 5

4th day in Grid

Location Howland $\longrightarrow$ 1-45N; 176-10W

Date 15 July

Time 0820 to 1857

Miles 84

Hours 10hrs 37min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	28	dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	7	
Bulwer's Petrel	1	
Leach's Storm Petrel	1	coll.
Red-tailed Tropicbird		
White-tailed Tropicbird	1	
Blue-faced Booby	111	43 S.A. 1 blue streamer
Brown Booby	3	Ad
Red-footed Booby	1	Ad
Great Frigatebird		
Lesser Frigatebird	16	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	643	Ad 4 coll. 1 banded 773-25557
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	2	
Pomarine Jaeger		
		Tern = 636
		Booby = 126
		Shear-Pet = 38
WR sp	1	frigate = 22
Pterodroma sp	2	Storm Petrel = 2
Booby sp	11	Tropicbird = 1
frigate sp	6	
		Total Birds 825
		Total Sightings
		Total Flocks 13 (697)
		Total Species 11

4th Nocturnal

Location 1-45N; 176-10W $\longrightarrow$ Howland

Date 15/16 July 66 Time 1857 to 0645

Miles 67 Hours 11 hrs 48 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	coll.
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby	2	
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	312	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Tern = 312
Pomarine Jaeger		shear-Pet = 3
Pterodroma sp.	2	storm Pet = 3
WRSP	2	Tropicbird = 1
shear-Pet	1	booby = 2
Bird sp.	2	Misc = 2
		Total Birds 323
		Total Sightings
		Total Flocks 13 (222)
		Total Species 5

5th Day in Grid

Location Howland $\longrightarrow$ 1-00N; 175-39W

Date 16 July 1966 Time 0830 to 1854

Miles 86 Hours 10hrs 24min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	2	
Bulwer's Petrel		
Leach's Storm Petrel	2	
Red-tailed Tropicbird	2	1 coll
White-tailed Tropicbird		
Blue-faced Booby	12	
Brown Booby	4	
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	387	4 coll.
Gray-backed Tern		
Common Noddy Tern		Tern = 387
Fairy Tern		shear-Pet = 6
Pomarine Jaeger		Tropicbird = 2
<i>Pterodroma hypoleuca</i>	2	Booby = 16
<i>Pterodroma sp.</i>	1	Frigate = 16
WRSP	7	Storm Pet = 9
shear-Pet	1	
Frigate sp	16	
		Total Birds 436
		Total Sightings
		Total Flocks 13 (340)
		Total Species 7

5th Nocturnal

Location 1-00N; 175-39W $\longrightarrow$ Howland

Observer _____ Date 16/17 July

Date 16/17 July

Time 1854 to 0630

Weather Miles 69

Miles 69

Hours 16 hrs 36 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	coll
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	coll
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	599	20 coll, 3 banded, 1 blue streamer
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Shear Pet	2	Tern = 599
WRS P	4	Shear. Pet = 3
Bird sp.	2	Storm Pet = 5
		Frigate = 1
		Misc = 2
		Total Birds 610
		Total Sightings
		Total Flocks
		Total Species 5

Location Howland $\rightarrow$ 0-12N; 175-38W

Date 17 July 1966 Time 0830 to 1857

Miles 90 Hours 10 hrs. 27 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	8	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	7	
Bulwer's Petrel		
Leach's Storm Petrel	8	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	9	1 blue streamer
Brown Booby		
Red-footed Booby	2	
Great Frigatebird	1	♂
Lesser Frigatebird	5	♂
Goulden Plover Frigate sp	8	
Ruddy Turnstone		
Sooty Tern	572	3 coll. 1 blue streamer
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		Tern = 572
Wh. throated S. Petrel	2	Booby = 11
		frigate = 14
		Shear-Pet = 15
		Storm-Pet = 10
		Total Birds 623
		Total Sightings
		Total Flocks 6(533)
		Total Species 10

6th Nocturnal

Location 0-12N; 175-38W $\longrightarrow$ Howland

Date 17/8 July 66 Time 1857 to 0648

Miles 95 Hours 11 hrs. 51 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	4/	1 coll
Bulwer's Petrel		
R Leach's Storm Petrel	3	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	1	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	202	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Pterodroma hypoleuca	1	Shear-Pet = 7 Storm Pet = 3
Shear-Pet	2	booby = 1 Tern = 202
		Total Birds 213
		Total Sightings
		Total Flocks 6 (52)
		Total Species 4

Nocturnal

Location 0-04S; 178-09W → 0-10S; 177-17W
 Observer _____ Date 18/19 July 66 Time 1902 to 0651
 Weather _____ Miles 91 Hours 11 hrs. 49 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	2	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	2	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
shear-pet	1	
Tropic bird sp	1	
Bird sp.	3	
		Total Birds 9
		Total Sightings
		Total Flocks
		Total Species

Location	0-10 S; 177-17W → Howland		
Observer	Date	19 July 66	Time 0651 to 1650
Weather	Rough seas	Miles	69 Hours 9 hrs. 59 min

Date 19 July 66 Time 0651 to 1650

Miles 69

Hours 9 hrs. 59 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	2	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	2	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	14	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	9	
Brown Booby		
Red-footed Booby		
Great Frigatebird sp.	1	
Lesser Frigatebird	5	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	242	4 ad. coll
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Tern = 242
Pomarine Jaeger		Shear-Pet = 19
		Booby = 9
Shear-Pet	1	Frigate = 6
		Total Birds 276
		Total Sightings
		Total Flocks 8 (207)
		Total Species 6

Location Howland ————— Howland

Date 20 July 66 Time 0800 to 1737

Miles 92 Hours 9hrs 37min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	4	dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel Tahitian	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel		
W Leach's Storm Petrel	7	
Red-tailed Tropicbird	3	
White-tailed Tropicbird		
Blue-faced Booby	54	1 blue streamer imm
Brown Booby	8	1 blue streamer SA
Red-footed Booby	3	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1353	4 ad coll 6 Blue Streamers
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	2	Tern = 1355
Pomarine Jaeger		Shear-Pet = 15
Pale-footed Shearwater	1	Tropicbird = 3
Booby sp	1	Booby = 66
frigate sp	"	Frigate = 11
		Storm Pet = 7
		Total Birds 1457
		Total Sightings
		Total Flocks 31 (1163)
		Total Species 12

Location *Howland → Baker → Howland*
Observer _____ Date *21 July 66* Time *0830 to 1715*
Weather _____ Miles *69* Hours *8hrs 45min*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	<i>2</i>	<i>1 coll dark phase</i>
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	<i>3</i>	<i>1 coll</i>
Bulwer's Petrel	<i>1</i>	
Leach's Storm Petrel	<i>2</i>	<i>2 coll</i>
Red-tailed Tropicbird	<i>2</i>	
White-tailed Tropicbird		
Blue-faced Booby	<i>62</i>	<i>1 blue streamer</i>
Brown Booby	<i>3</i>	
Red-footed Booby	<i>17</i>	<i>1 blue streamer</i>
Great Frigatebird	<i>1</i>	
Lesser Frigatebird	<i>9</i>	<i>3 coll.</i>
Golden Plover		
Ruddy Turnstone	<i>.</i>	
Sooty Tern	<i>1291</i>	<i>32 ad. coll, 4 banded, 6 blue streamer</i>
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>WRSP</i>	<i>4</i>	<i>Tern = 1291</i>
<i>Frigate sp.</i>	<i>185</i>	<i>Shear Pet = 6</i>
		<i>Tropicbird = 2</i>
		<i>Booby = 82</i>
		<i>Frigate = 203</i>
		<i>Storm Pet = 6</i>
		Total Birds <i>1582</i>
		Total Sightings
		Total Flocks <i>44 (1380)</i>
		Total Species

Nocturnal Grid

Location Howland $\longrightarrow$ 0-12N; 176-19W

Observer

Date 22 July 1966 Time 0300 to 0649

Weather

Miles 24

Hours 3 hrs 49 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	2	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird sp	2	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	6	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
shear-Pet	1	Tern = 6 shear-Pet = 1
Bird sp.	1	Frigate = 2 Storm Pet = 2 Misc = 1
		Total Birds 12
		Total Sightings
		Total Flocks
		Total Species 3

Grid

Location	0-12N; 176-19W → 1-29S; 175-30W	
Observer	Date	22 July 66 Time 0649 to 1850
Weather	Miles	113 Hours 12 hrs 1 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	7	dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater	1	
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel	1	
R Leach's Storm Petrel	4	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby	2	
Brown Booby		
Red-footed Booby		
Great Frigatebird	6	
Lesser Frigatebird	40	2 coll
Golden Plover		
Ruddy Turnstone		
Sooty Tern	773	1 coll
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	3	
Pomarine Jaeger		
Pterodroma sp	1	
Frigate sp	161	
		Total Birds 1009
		Total Sightings
		Total Flocks 15 (955)
		Total Species 12

feeding F. 6 (867)

Location 11-17S; 171-52W → 12-56S; 171-10W

Date 28 July 66 Time 0640 to 1816

Miles 107 Hours 1 hrs 36 min

SI-MNH-11-1-66

Location Pago Pago → 13-025; 170-48W

Date 2 Aug 66 Time 1045 to 1816

Miles 84. Hours 7 hrs 31 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird	7	
Blue-faced Booby		
Brown Booby		
Red-footed Booby	92	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern	211	
Fairy Tern	40	Tern = 281
Pomarine Jaeger		Tropicbird = 7
Haw. Noddy	30	Booby = 92
		Total Birds 380
		Total Sightings
		Total Flocks 3(370)
		Total Species 5

Time 1200 to 1818

Hours 6 hrs 18 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	1	
White-tailed Tropicbird	3	1 coll.
Blue-faced Booby		
Brown Booby		
Red-footed Booby	1	
Great Frigatebird		
Lesser Frigatebird	f	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	71	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>Frigate sp</i>	1	shear-Pet = 1 Tern = 71
<i>Cook's Petrel</i>	1	Tropic bird = 4 Booby = 1 Frigate = 2
		Total Birds 79
		Total Sightings
		Total Flocks 4(73)
		Total Species 6

Location 6-13S; 166-03W —→ 4-54S; 164-55W
 Observer _____ Date 5 Aug 66 Time 0644 to 1802
 Weather seas rough Miles 104 Hours 11hrs 18min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel Tachitran	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird	2	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	2	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	1	
Pomarine Jaeger		
Cook's Petrel	8	1 coll.
Shear-Pet	1	
		Shear-Pet = 16
		Tern = 3
		Tropicbird = 2
		Frigate = 1
		Total Birds 16
		Total Sightings
		Total Flocks
		Total Species 5

Jarvis Island

Location 1-195; 161-07W → 0235; 160-02W
 Observer _____ Date 7 Aug 66 Time 0549 to 1425
 Weather seas rough Miles 87 Hours 8hrs 36min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	3	2 dark - 1 light
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel	4	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	16	
White-tailed Tropicbird		
Blue-faced Booby	37	
Brown Booby	3	
Red-footed Booby	9	
Great Frigatebird	3	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1292	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Black-browed Albatross	2	Albatross = 2
Pterodroma externa	2	Shear-Pet = 12
Cook's Petrel	2	Storm-Pet = 2
Shear-Pet	1	Tern = 1292
WRSP	2	Tropicbird = 16
Frigate Sp	19	Booby = 49
		Frigate = 22
		Total Birds 1395
		Total Sightings
		Total Flocks 14 (1288)
		Total Species 12

Location Jarvis Island → 0-185; 161-52W

Observer

Date 10 Aug 66

Time 0800 to 1756

Weather clear + calm

Miles 111

Hours 9hrs 56min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	4	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / Tahitian	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel	1	
Leach's Storm Petrel	2	1 coll
Red-tailed Tropicbird	14	
White-tailed Tropicbird		
Blue-faced Booby	58	
Brown Booby	3	
Red-footed Booby	16	
Great Frigatebird	1	
Lesser Frigatebird	7	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	662	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
WRSP	8	Shear-Pet = 6
WthSP	3	Storm-Pet = 13
Frigate SP.	19	Tern = 662
Booby Sp	5	Tropicbird = 14
		Booby = 82
		Frigate = 27
		Total Birds 804
		Total Sightings
		Total Flocks 25 (531)
		Total Species 12

Location 0-07S; 164-06W → 0-03N; 166-01W

Observer

Date 11 Aug 66 Time 0605 to 1813

Weather

Miles 116

Hours 12hrs 8min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel	1	Whales = <u>Feresa</u> , <u>Mesoplodon</u>
Mottled Petrel		<u>Globicephala</u> , <u>Physeter</u>
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	3	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		Shear-Pet=4
Golden Plover		Storm Pet=4
Ruddy Turnstone		Tern = 106
Sooty Tern	106	Tropicbird=3
Gray-backed Tern		Shorebird=3
Common Noddy Tern		Misc=1
Fairy Tern		
Pomarine Jaeger		
WRSP	3	2 Wilson's Type?
Storm Pet sp	1	— Pelagodroma marina?
Pterodroma sp	1	
Bristle-th. Curlew	3	
Cook's Petrel	1	
Bird sp	1	
		Total Birds 121
		Total Sightings
		Total Flocks 2 (97)
		Total Species 7

Location 0-07N; 168-09W —————> 0-20N; 170-24W

Observer

Date 12 Aug 66 Time 0615 to 1829

Weather

Miles 136

Hours 12hrs 14min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / <i>Tahiti Pet</i>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	3	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird	2	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	34	
Gray-backed Tern		Storm Pet = 12
Common Noddy Tern		Shear Pet = 9
Fairy Tern	1	Tern = 35
Pomarine Jaeger		Tropicbird = 3
Shear Pet	4	Frigate = 4
Cook's Pet	2	
WRSP	10	
Storm Pet. sp	2	Fregetta?
Pterodroma sp.	1	
Frigate sp.	2	
		Total Birds 63
		Total Sightings
		Total Flocks 2(30)
		Total Species 8

Location 0-28N; 172-31W $\longrightarrow$ 0-36N; 174-36W

Date 13 Aug 66 Time 0631 to 1847

Miles 125 Hours 12hrs 16min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	/	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	/	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Shear-Pet	1	Shear-Pet = 2
WR storm Pet	4	storm Pet = 1/ Tern = 1
		Total Birds 14
		Total Sightings
		Total Flocks
		Total Species 3

1st Nocturnal

Location *0-36N; 174-36W* → *0-48N; 176-38W* *Howland*

Observer _____ Date *13/14 Aug 66* Time *1847* to *0629*

Weather _____ Miles *124* Hours *11 hrs 42 min*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	<i>1</i>	
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	<i>85</i>	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>WRS P</i>	<i>2</i>	
<i>Shear-Pet</i>	<i>1</i>	<i>Shear Pet = 1</i>
<i>Bird sp</i>	<i>10</i>	<i>Storm Pet = 2</i>
		<i>Tern = 85</i>
		<i>Booby = 1</i>
		<i>Misc = 10</i>
		Total Birds <i>99</i>
		Total Sightings
		Total Flocks
		Total Species <i>4</i>

1st day grid

Location Hoyland → Baker → Howland

Date 14/ Aug 66 Time 0830 to 1855

Miles 68 Hours 10 hrs - 25 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel <i>Tahitian</i>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel		
? Leach's Storm Petrel	2	
Red-tailed Tropicbird	4	
White-tailed Tropicbird		
Blue-faced Booby	33	
Brown Booby	3	
Red-footed Booby	6	
Great Frigatebird <i>sp</i>	146	
Lesser Frigatebird	86	
Golden Plover	4	
Ruddy Turnstone		
Sooty Tern	1065	Ad. 10 coll, 1 banded (843-38286) 2 B. Streamer
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Wandering Tattler	1	
		Total Birds 1360
		Total Sightings
		Total Flocks 20 (1148)
		Total Species 11

Location *Howland* → *0-165; 175-38W*
 Observer *Date 15 Aug 66* Time *0800 to 1850*
 Weather Miles *91* Hours *10hrs 50min*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	<i>1</i>	
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	<i>3</i>	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	<i>1</i>	
White-tailed Tropicbird		
Blue-faced Booby	<i>47</i>	
Brown Booby		
Red-footed Booby	<i>22</i>	
Great Frigatebird	<i>3</i>	
Lesser Frigatebird	<i>37</i>	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	<i>540</i>	<i>1 ad coll - 1 B. Streamer</i>
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>Cook's Petrel</i>	<i>2</i>	<i>Storm Pet. = 2</i>
<i>Pterodroma sp.</i>	<i>5</i>	<i>Shear Pet = 11</i>
<i>WRSP</i>	<i>2</i>	<i>Tern = 540</i>
<i>Frigate sp</i>	<i>53</i>	<i>Tropicbird = 1</i>
		<i>Booby = 69</i>
		<i>Frigate = 93</i>
		Total Birds <i>716</i>
		Total Sightings
		Total Flocks <i>16 (634)</i>
		Total Species <i>10</i>

Nocturnal

Location 0-165; 175-38W —————> Howland
 Observer _____ Date 15/16 Aug 66 Time 1850 to 0630
 Weather _____ Miles 109 Hours 11hrs 40min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
LOP Leach's Storm Petrel	4	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	2	
Brown Booby		
Red-footed Booby	2	
Great Frigatebird SP	2	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	34	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Bird sp.	5	Storm Pet = 4
		Tern = 34
		Booby = 4
		Frigate = 2
		Misc = 5
		Total Birds 49
		Total Sightings
		Total Flocks 1(8)
		Total Species 5

Location Howland

→ 0-355; 176-57W

Observer

Date 16 Aug 66 Time 0815 to 1855

Weather

Miles 92

Hours 10hrs 40min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	8	
Bulwer's Petrel	2	
Leach's Storm Petrel		
Red-tailed Tropicbird	2	
White-tailed Tropicbird	2	
Blue-faced Booby	10	
Brown Booby		
Red-footed Booby		
Great Frigatebird	1	1 coll
Lesser Frigatebird	1	1 coll.
Golden Plover		
Ruddy Turnstone		
Sooty Tern	258	2 coll + 1 B. Streamer
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Storm Pet = 6
Pomarine Jaeger		Shear-Pet = 12
<i>Pterodroma externa</i>	1	Tern = 258
<i>White-throated St. Pet.</i>	1	Tropic bird = 4
<i>W R SP</i>	5	Booby = 10
<i>Frigate Sp.</i>	102	Frigate = 104
<i>Wandering Tattler</i>	1	coll shore bird = 1
		Total Birds 395
		Total Sightings
		Total Flocks 10(325)
		Total Species 12

Nocturnal

Location *0-355; 176-57W* → *Howland*
 Observer _____ Date *16/17 Aug 66* Time *1855* to *0649*
 Weather _____ Miles *118* Hours *11hrs 53min*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	<i>1</i>	<i>dark phase</i>
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	<i>1</i>	
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	<i>22</i>	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		<i>Storm-Pet = 5</i>
Pomarine Jaeger		<i>Shear Pet = 3</i>
<i>White-throated S.P</i>	<i>3</i>	<i>Tern = 22</i>
<i>Storm Pet Sp</i>	<i>1</i>	<i>Booby = 1</i>
<i>WR Sp</i>	<i>1</i>	<i>Frigate = 1</i>
<i>Pterodroma Sp</i>	<i>2</i>	<i>shorebird = 1</i>
<i>shorebird Sp</i>	<i>1</i>	<i>Misc = 3</i>
<i>Bird Sp</i>	<i>3</i>	
<i>Frigate Sp</i>	<i>1</i>	
		Total Birds <i>36</i>
		Total Sightings
		Total Flocks
		Total Species <i>8</i>

Date 17/18 Aug 66 Time 1859 to 0649
Miles 69 Hours 11hrs 50min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	33	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Bird sp	6	
		Total Birds 39
		Total Sightings
		Total Flocks 3(15)
		Total Species 1

Date 18 Aug 66 Time 0649 to 0814
Miles 76 Hours 1115 1851
9hrs 01min

SI-MNH-11-1-66
$$ff = (64)$$

Noc Turnal

Location

Observer

Date 18/19 Aug. 66 Time 1851 to 0649

Weather

Miles 124 Hours 11 hrs 58 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	7	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	18	
Pomarine Jaeger		
Storm Pet sp	1	
		Total Birds 9
		Total Sightings
		Total Flocks
		Total Species 2

Date	19 Aug 66	Time	0649 to 1851
Miles	99	Hours	12hrs 02min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel	1	Tahitian
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	10	
Red-tailed Tropicbird	2	1 coll
White-tailed Tropicbird		
Blue-faced Booby	3	
Brown Booby		
Red-footed Booby	2	
Great Frigatebird	3	
Lesser Frigatebird	17	1 coll Ad ♂
Golden Plover		
Ruddy Turnstone	2	
Sooty Tern	147	1 ad coll. 1 B. Streamer
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Pterodroma sp	2	
Shear Pet	1	
Frigate sp	10	
		Storm Pet = 10 Shear Pet = 4 Tern = 147 Tropic bird = 2 Booby = 5 Frigate = 30 Shorebird = 2
		Total Birds 200
		Total Sightings
		Total Flocks 3 (159)
		Total Species 9

$$f = 1(120)$$

Out of Grid

Location 03-30N; 174-38W → 05-03N; 173-18W

Observer

Date 20 Aug 66 Time 0635 to 1844

Weather

Miles 123

Hours 12hrs 9min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	88	
Sooty Shearwater		
Slender-billed Shearwater	} 2	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	} 18 16	3 JFP coll.
White-necked Petrel		
Kermadec Petrel	1	
Phoenix Island Petrel Tahiti	6	2 Phoenix Is. coll.
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
^{WR} Leach's Storm Petrel	6	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	1	
Red-footed Booby	1	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover	2	
Ruddy Turnstone	2	
Sooty Tern	84	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Storm Pet = 7
Pomarine Jaeger		Shear Pet = 122
Pale-footed Shear.	1	Tern = 84
Pterodroma Sp	2	Tropic bird = 1
Storm Pet sp.	1	Booby = 2
Shear Pet	3	Shorebird = 4
		Total Birds 220
		Total Sightings
		Total Flocks 5 (169)
		Total Species 14

Weather

[illegible]

Location

Observer

Date 2 Dec 1966 Time 0700 to 1807

Weather

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	22							1 coll
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	2							
Bulwer's Petrel								
Sooty Petrel Pterodroma sp	3							
Red-tailed Tropicbird								Shear-Pet - 14/3
White-tailed Tropicbird	1							Storm Pet - 3
Masked Booby								Tropicbird - 1
Brown Booby								Booby - 7
Red-footed Booby	7							Frigate - 1
Great Frigatebird	1							Jaeger - 2
Golden Plover								Tern - 219
Ruddy Turnstone								Bird - 1
Wandering Tattler								Total Birds - 377
Sanderling Jaeger sp	2							Total Species - 15
Bristle-thighed Curlew								Total Flocks - 8/318
Sooty Tern	219							Total Miles - 71
Gray-backed Tern								Birds/mile - 5.3
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
Bird sp	1							
Pterodroma externa	5							
JFP	16							
WNP	2							
Kermadec Petrel	5							
Pt. hypoleuca	1							
Bwp	15							1 coll
Shear-Pet	67							
Murphy's Petrel	1							
Tahiti Petrel	1							
Pip/Tah. Petrel	1							
Sooty-S/endorbill	1							
WRSP	3							
Dark-Rump-Petrel	1							

0806 FF Sooty Tern — 19 }
Shear-Pet — 40 } 59

0824 FF Shear-Pet — 10 — 10

0930 TF JFP — 4 }
BWP — 2 } 7
M.P. — 1 }

1147 SF Sooty Tern — 30 }
JFP — 2 } 32

1256 FF Sooty Tern — 7 — 7

1323 FF Sooty Tern — 115 }
Shear-Pet — 15 } 130

1350 FF Sooty Tern — 35 }
JFP — 3 }
Wedgetail — 7 } 51
BWP — 5 }
Jaeger Sp — 1 }

1530 FF Sooty Tern — 7 }
Wedgetail — 12 } 22
BWP — 2 }
Pt. externa — 1 }

Location

Observer

Date 3 Dec 1966 Time 0714 to 1823

Weather

11 hrs 9 min

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater		34						28 Light 6 dark - 6 imm
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel								
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird	1							
White-tailed Tropicbird								
Masked Booby		1						imm
Brown Booby								
Red-footed Booby		12						1 orange streamer Ad
Great Frigatebird		2						1 Ad ♀
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern		75						11 imm one Orange Streamer Ad
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern	2							Shear-Pet = 155
Pterodroma Sp.	1							Tropicbird = 1
Shear-Pet	11							Booby = 13
Pt. externa	31							Frigate = 3
JFP	48							Taeger = 1
WNP	1							Tern = 77
BWP	24							Total = 250
Kermadec Petrel	1							light 8 Flocks = 158
Pip-Tah Petrel	2							
Sooty/slenderbill	1							Total miles = 96
sooty Shearwater	1							Birds/mile = 2.6
Frigate Sp	1							
Pomerina Jaeger	1							dark Ad.

S Flock

0758

JFP - 4
BWP - 1 } 5

0815

S.F

RFB - 3
JFP - 3
Wedgetail - 1
BWP 1 } = 8

0828

SF

Sooty Tern - 14 = 14

0920 FF

Sooty Tern - 17
BWP - 4
JFP - 6
Wedgetail - 3
Fairy Tern - 1 } = 31

1016 FF

JFP - 2
Wedgetail - 11
Sooty Tern - 25
BWP - 1 } = 39

1052

SF

Sooty Tern - 8
Wedgetail - 7
JFP - 5
Fairy Tern - 1 } 21

1251

FF

RFB - 1
G. Frigate - 1
Pt. externa - 20
BWP - 6
Wedgetail - 5
Pip/Tah - 1
Pom. Jaeger - 1
Sooty Tern - 10 } 35

1440

SF

JFP - 5 — 5

Miles	96.5	Hours	1 hrs 37 min
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[illegible]

1015

JFP - 24
WNP - 6
Wedgetail - 1 } 31

1216

FF

Shear-Pet - 10 - 10

Location

Observer

Date 5 Dec. 1966 Time 0742 to 1848

Weather

Miles 107

Hours

1 hr 06 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	21	1 coll 20 light - 1 dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	31	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	3	
Bulwer's Petrel		
Leach's Storm Petrel sp	4	
Red-tailed Tropicbird		
White-tailed Tropicbird	2	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird	1	Ad ♂
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	35	
Gray-backed Tern		
Common Noddy Tern		Shear-Pet - 76
Fairy Tern		Storm-Pet - 4
Pomarine Jaeger		Tropicbird - 2
<i>Pterodroma externa</i>	14	Frigate - 2
Frigate sp	1	Tern - 35
Kermadec Petrel	5	Bird - 1
Shear-Pet	2	
Bird sp.	1	
		Total Birds 120
		Total Sightings
		Total Flocks 2/89
		Total Species 9

1128 FF JFP - 26 } 27
BWP - 1 }

1510 FF Sooty Tern - 35 } 61
Wedgetail - 17 }
PT. extern - 9 }

Date 6 Dec. 1966 Time 0736 to 1841

Miles 108 Hours 11hrs 05min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	2	light phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	6	
White-necked Petrel		
Kermadec Petrel	3	light
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel	4	
Black-winged Petrel	2	
Bulwer's Petrel		
Leach's Storm Petrel sp	1	
Red-tailed Tropicbird	1	
White-tailed Tropicbird	1	
Blue-faced Booby		
Brown Booby		
Red-footed Booby	4	1 ad light phase, 2.5 Ad. 1 imm
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear-Pet - 20
Pomarine Jaeger		Storm Pet - 1
Shear-Pet	1	Tropicbird - 2
Pt. hypoleuca	2	Booby - 4
		Total Birds 27
		Total Sightings
		Total Flocks 0
		Total Species 8

Miles	92.5	Hours
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SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	4	3 imm 1? light phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	4	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	2	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	1	Ad
White-tailed Tropicbird	1	Ad
Blue-faced Booby	1	Ad
Brown Booby		
Red-footed Booby	21	11 light Ad. 3 imm 3 ad
Great Frigatebird	2	2 Ad ♂
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Shear - pet	2	Shear - Pet - 13
Pterodroma externa	1	Tropic bird - 2 Booby - 22 Frigate - 2
		Total Birds 39
		Total Sightings
		Total Flocks 1/6
		Total Species 8

Date 15 Dec. 66 Time 0732 to 1824

Miles	99	Hours
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SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	4	Ad light
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	2	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	6	1 ad light 2 imm 3 S Ad
Great Frigatebird	1	Ad ♀
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Pt. externa	1	Shear-Pet - 8
Dark-rump Petrel	1	Booby - 6 Frigate - 1
		Total Birds 15
		Total Sightings
		Total Flocks 0
		Total Species 5

Location

Observer

Date 16 Dec. 61 Time to

Weather

Miles 69 Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	12	
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	3	
White-necked Petrel		
Kermadec Petrel	3	
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	3	imm
Brown Booby	1	Ad
Red-footed Booby	4	2imm 1SA 1 Ad light
Great Frigatebird	3	1 Ad ♂ 1 Ad ♀
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	50	
Gray-backed Tern		
Common Noddy Tern		Tern - 56
Fairy Tern		Shear Pet - 22
Pomarine Jaeger		Storm Pet - 2
Shear-Pet	1	Booby - 8
Pt. externa	3	Frigate - 3
WRSP	2	miscellaneous - 1
Fairy Tern & Tropicbird	1	
		Total Birds 86
		Total Sightings
		Total Flocks 2/59
		Total Species 10

Hours

SI-MNH-11-1-66

Location At Sea

Observer Lewis, Bulmer, Harrington Smith Date 7 Dec 1966 Time 0728 to 1850

Weather

[illegible]

Location /Surf
Observer Bulme Date 30 April Time _____ to _____
Weather _____ Miles _____ Hours 1600 - dusk

SPECIES	NUMBERS	REMARKS
Laysan Albatross		common
Black-footed Albatross		regular
Wedge-tailed Shearwater		common
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		regular (saw about 25)
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		regular (saw about 25)
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		Abundant
White-tailed Tropicbird		
Blue-faced Booby	10±	
Brown Booby	50±	
Red-footed Booby	-	common
Great Frigatebird		common
Lesser Frigatebird		
Golden Plover	48	35 B 6 changing 7 non-breeder 1 coll
Ruddy Turnstone	41	33 B 8 non breed
Sooty Tern	10,000	2 swirls each about 200
Gray-backed Tern		
Common Noddy Tern		common
Fairy Tern		rare (5 birds)
Pomarine Jaeger		
Wandering Tattler	3	2 B 1 NBr.
Curllew	1	(near BB nest)
White capped Noddy		common
Seal	25	5 pups
		Total Birds
		Total Sightings
		Total Flocks
		Total Species

Hours

SI-MNH-11-1-66

Enter Grid 0520

Location

Observer

Date 9 Jan

Time 0645 to 1811

Weather

Miles 126

Hours 1 hrs 26 min

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	3	
White-necked Petrel		
Kermadec Petrel	3	light
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	3	
White-tailed Tropicbird	3	1 coll.
Blue-faced Booby		
Brown Booby		
Red-footed Booby	5	3 imm 1 dark phase ad
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Birdsp	2	Shear - pt - 8
Pterodroma sp	2	Tropicbird - 6
WRSP	2	Booby - 5
		Storm Pet - 2
		Bird - 2
		Total Birds 23
		Total Sightings
		Total Flocks 0
		Total Species 6

Hours 1 hrs 2 2 min

SI-MNH-11-1-66

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross	4	
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	2	
White-tailed Tropicbird		
Blue-faced Booby	1	
Brown Booby		
Red-footed Booby	8	
Great Frigatebird	3	2 Ad ♂
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Shear-Pet	2	Shear-Pet - 7 Booby - 9 Tropicbird - 2 Frigate - 3
		Total Birds 21
		Total Sightings
		Total Flocks 0
		Total Species 6

Location *N. Grid*

Observer

Date 12 Jan 67 Time 065 to 1820

Weather

Miles

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	/	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	7	1 coll
White-tailed Tropicbird		
Blue-faced Booby	/	
Brown Booby		
Red-footed Booby		
Great Frigatebird	3	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Tropicbird sp	/	
		Total Birds 13
		Total Sightings
		Total Flocks 0
		Total Species 4

$$3/1m = 1.626$$

Location

Observer *Bulmer*

Date *8 Feb 67* Time to

Weather

Miles *683* Hours *10.0*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross	<i>1</i>	
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater	<i>3</i>	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger	<i>4</i>	<i>1 imm 3 Ad light</i>
<i>Shear-Pet</i>	<i>6</i>	<i>Shear Pet - 10</i>
<i>Red Pharelope</i>	<i>3</i>	<i>Pharelope - 6</i>
<i>Pharelope sp</i>	<i>3</i>	<i>Jaeger - 4</i>
<i>Western Gull</i>	<i>16</i>	<i>Gull - 109</i>
<i>Herring Gull</i>	<i>32</i>	<i>Alacids - 6</i>
<i>California Gull</i>	<i>13</i>	
<i>Kittiwake</i>	<i>44</i>	<i>4 Ad, 40 imm</i>
<i>Sabine's Gull</i>	<i>2</i>	
<i>Gull sp</i>	<i>2</i>	
<i>Xantus Murrelet</i>	<i>6</i>	
		Total Birds <i>135</i>
		Total Sightings <i>1 mm</i>
		Total Flocks <i>2 / 14</i>
		Total Species <i>10</i>

0820

FF 0820 Kittiwake 4 — 7
Shear-Pet 3

SF 0930 Kittiwake 6 — 7
Manx Shearwater -1

B/Lm 1.173

Location

Observer Bulmer

Date 9 Feb

Time to

Weather

Miles 104

Hours 10.5

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	/	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
WRSP	118	
Ashy ST. Petrel	2	
DRSP	1	
		storm Pets 122
		Total Birds 122
		Total Sightings
		Total Flocks 7/79
		Total Species 2

Sitting flock 0828

WRSP 5

S; F 1002

WRSP 7

S; F 1025

WRSP 9

S; F 1045

WRSP 17

S; F 1206

WRSP 18

S; F 1218

WRSP - 16 = 17
Leach's St Pet - 1

S; F 1302

WRSP - 6

$$B/m = -200$$

Location

Observer *Bulmer*

Date 10 Feb 67 Time _____ to _____

Weather

Miles 95 Hours 9.3

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	7	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird <i>Pink</i>	3	Ad ♀
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		Shear-Pet-3
Cook's Petrel	3	Storm-Pet-13
WRSP sp	6	Frigate-3
		Total Birds 19
		Total Sightings
		Total Flocks 0
		Total Species 3

B/Lm = 2-796

Location

Observer

Date 11 Feb 67 Time to

Weather

Miles 108 Hours 10.5

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	12	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	48	47 Ad light 1 imm
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>Puffinus p. auricularis</i>	213	Shear-Pet - 213
WRSP sp	1	Storm Pet - 39
DRSP sp	3	Booby - 48
Storm Petrel sp	19	Tropicbird - 2
Least Storm Petrel	4	
Red-billed Tropicbird	2	
		Total Birds 302
		Total Sightings
		Total Flocks 10 / 170
		Total Species 5

TR 0740 Puffinus p. auricularis - 5

FF 0906 Puffinus p. auricularis - 70

SF 1000 Puffinus p. auricularis - 30

TR 1106 " " - 6

TF 1117 " " - 6

TF 1130 " " - 6

TF 1243 Storm Petrel sp - 7 = 8
Least Storm Petrel - 1

TF 1252 Puffinus p. auricularis - 6

TF 1344 RFB - 6

TF 1602 RFB - 21

Location

Observer

Date 12 Feb

Time

to

Weather

Miles ~~3.0~~

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater	331	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel	1	dark
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	73	
Red-tailed Tropicbird	5	
White-tailed Tropicbird		
Blue-faced Booby	26	
Brown Booby		
Red-footed Booby	157	
Great Frigatebird SP	1	
Lesser Frigatebird	12	3 AD ♀
Golden Plover		
Ruddy Turnstone		
Sooty Tern	267	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear Pet - 332
Pomarine Jaeger	2	Storm Pet - 132
WRSP sp	57	Tropicbird - 5
Least Storm Petrel	2	Booby - 198
Blue footed Booby	5	Frigate - 13
Parasitic Jaeger	6	Tern - 267
		Jaeger - 8
		Total Birds 945
		Total Sightings
		Total Flocks 6 / 812
		Total Species 12

0829 SF Leachs - 6 } 7
Townsend - 1 }

1044 FF Sooty Tern - 15 } 35
Townsend - 20 }

1047 SF Leachs - 4 } 5
Least - 1 }

1630 FF Sooty Tern - 250
Townsend - 300
Mag. Frigate - 12
Pom. Jaeger - 2
Par. Jaeger - 6
B. Footed Booby - 4
RFB - 150
BFB - 25
WRSP - 9
Kermadec - 1 } 734

1724 SF WRSP - 23

1822 SF Leach's - 8

-845

B/1m = ~~333~~

Location

Observer

Date 13 Feb 67 Time 0915 to 1825

Weather

Miles ~~207~~ ~~20~~ Hours

71

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel	3	light
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	18	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	2	
Brown Booby	1	
Red-footed Booby	6	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		Shear-Pet-19
WRSP sp	12	Storm Pet-32
Shear Pet	2	Booby-9
Townsend Shear.	14	
Ashy St. Petrel	1	
PRSP sp	1	
		Total Birds 60
		Total Sightings
		Total Flocks 1/5
		Total Species 7

1702 SF. Leachis - 4
Ashy - 1 ~~3~~ 5

Hours

SI-MNH-11-1-66

13 15 FF Sooty Tern 75 276
BFB 1)

Location

Observer

Weather

B/m = 1-364 2.708

Date 16 Feb 67 Time to

Miles 79 Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
<i>Toconao</i> Nowell's Shearwater	3	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	2	
Red-tailed ^{billed} Tropicbird	2	
White-tailed Tropicbird		
Blue-faced Booby	1	5 ad.
Brown Booby	52	
Red-footed Booby	1	
Great Frigatebird		
<i>M</i> Least Frigatebird	3	1 ♂ 1 ♀ 1 imm
Golden Plover		
Ruddy Turnstone		
Sooty Tern	96	Ad
Gray-backed Tern		
<i>Haw</i> Common Noddy Tern	1	
Fairy Tern		Shear Pet - 3
Pomarine Jaeger	1	Ad 1 light Storm Pet - 4
Booby Sp.	1	Tropicbird - 2
Phalarope sp	23	Booby - 55
Red Phalarope	30	Frigate - 3
Jaeger sp	1	Tern - 97
Least Storm Pet	1	Jaeger - 3
W R S P sp	1	Phalarope - 54
Parasitic Jaeger	1	Ad light
		Total Birds 221
		Total Sightings
		Total Flocks 8/145
		Total Species 13

0935 TF Phalarope Sp - 7

0938 FF Red Phalarope - 5

1522 TF sooty Tern - 7

1710 PF sooty Tern - 35
BB — 8
Phalarope sp. - 12
RBTB — 1
Townsend Shear. - 1 } 57

1722 TF BB — 5

1745 FF sooty Tern - 42
BB — 1 } 43

1750 TF BB — 9

1755 FF sooty Tern - 10
Townsend - 2 } 12

B/lm = ⁶⁶³~~238~~

Location

Observer

Date 20 Feb 67 Time to

Weather

Miles ~~204~~ Hours

104

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	2	
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Townsend Newell's Shearwater	2	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	5	
Billed Red-tailed Tropicbird	8	
White-tailed Tropicbird		
Blue-faced Booby	4	
Brown Booby	8	
Red-footed Booby	21	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear-Pet - 4
Pomarine Jaeger	1	Ad light Storm Pet - 17
Jaeger sp	1	Tropicbird - 8
WRSP sp	12	Booby - 34
Phalarope sp	4	Jaeger - 2
booby sp	1	Phalarope - 4
		Total Birds 69
		Total Sightings
		Total Flocks 2 / 13
		Total Species 9

B/Lm = ~~253~~

Location

Observer

Date 21 Feb Time to

Weather

Miles ~~100~~ 91 Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	3	light
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	2	imm
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		Shear Pts - 4
Fairy Tern		Storm Pts - 10
Pomarine Jaeger		Tropicbird - 2
Red Phalarope	3	Booby - 4
WRSP	10	Phalarope - 3
Red-billed Tropicbird	2	
Blue-footed Booby	1	
Booby sp	1	
Townsend Shearwater	1	
		Total Birds 23
		Total Sightings
		Total Flocks 6
		Total Species 7

B/m = 978 1.595

Location

Observer

Date 22 Feb

Time

to

Weather

Miles 111

Hours

SPECIES	NUMBERS	REMARKS	
Laysan Albatross			
Black-footed Albatross			
Wedge-tailed Shearwater	31	10 dark 21 light	
Sooty Shearwater			
Slender-billed Shearwater			
Christmas Island Shearwater			
Newell's Shearwater			
Juan Fernandez Petrel	1		
White-necked Petrel			
Kermadec Petrel			
Phoenix Island Petrel			
Mottled Petrel			
Bonin Island Petrel			
Black-winged Petrel			
Bulwer's Petrel			
Leach's Storm Petrel	31		
Red-tailed Tropicbird	1	S. Ad	
White-tailed Tropicbird			
Blue-faced Booby	1	S. Ad	
Brown Booby			
Red-footed Booby			
Great Frigatebird			
Lesser Frigatebird			
Golden Plover			
Ruddy Turnstone			
Sooty Tern	75	1 S. ad.	
Gray-backed Tern			
Common Noddy Tern			
Fairy Tern			
Pomarine Jaeger	1	Ad light	
WR Sp sp	30		
Frigate sp	3	imm	
Shear Pet	2		
Booby sp	4		
Booby Sp	1		
		Total Birds 177	
		Total Sightings	
		Total Flocks 3/114	
		Total Species	

Location

Observer

Date 23 Feb 87 Time _____ to _____

Weather

Miles ~~74~~ 90 Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	8	7 light, 1 dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	24	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1	Ad
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Long-tailed Jaeger	1	imm
Red Phalarope	3	
WRSP sp	3	
Tern sp	1	
		Total Birds 41
		Total Sightings
		Total Flocks 1/12
		Total Species 5

Miles ~~175~~ 117 Hours

SI-MNH-11-1-66

Miles ~~100~~ 78 Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	dark
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	10	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	23	Ad
Gray-backed Tern		Shear-Pet - 1
Common Noddy Tern		Storm Pet - 12
Fairy Tern		Frigate - 1
Pomarine Jaeger		Phalarope - 2
Frigate S	1	Tern - 28
WR SP	2	
Red Phalarope	2	
		Total Birds 39
		Total Sightings
		Total Flocks 1/23
		Total Species 5

Miles ~~46~~ 92 Hours

SI-MNH-11-1-66

333

B/m = 179

Location			
Observer	Date 28 Feb 67	Time	to
Weather	Miles 87	Hours	

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	2	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	6	4 ad 2 imm
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear-Pet 2
Pomarine Jaeger		Storm Pet - 20
WRS P	18	Tern - 6
Shear-Pet	1	Phalarope - 1
Dark-rump Petrel	1	
Red Phalarope	1	
		Total Birds 29
		Total Sightings
		Total Flocks
		Total Species 4

B/Lm = 413

Location

Observer

Date 1 Mar

Time

to

Weather

Miles

75

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	4	
Bulwer's Petrel		
Leach's Storm Petrel	3	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	9	Ad
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	2	
Pomarine Jaeger		
Pterodroma sp	1	
White-winged Pet	2	
WRSP sp	9	
Phalarope sp	1	
		Total Birds 31
		Total Sightings
		Total Flocks 1/9
		Total Species 6

B/Lm = 709

Location

Observer

Date 2 March Time to

Weather

Miles 86 Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	4	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	2	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	29	
Gray-backed Tern		
Common Noddy Tern		Shear-Pet - 12
Fairy Tern	5	Storm Pet - 10
Pomarine Jaeger		Tropicbird - 2
Shear-Pet	1	Tern - 34
WRS P	6	Phalarope - 3
White Throated Storm Petrel	4	
Tahiti Petrel	1	
White-winged Petrel	5	
Red Phalarope	3	
		Total Birds 61
		Total Sightings
		Total Flocks 2/30
		Total Species 10

Location

Observer

Date 3 March

Time

to

Weather

Miles

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	2	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	2	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	36	H&
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	1	
Pomarine Jaeger		Shear-Pet - 35
White-winged Petrel	31	Storm Pet - 6
White-throated Storm Pet	2	Tropicbird - 2
WRSP	4	Tern - 37
Murphy's Petrel	2	
		Total Birds 80
		Total Sightings
		Total Flocks 3/51
		Total Species 8

B/Lm = 750

Location

Observer

Date 4 March

Time to

Weather

Miles 84

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater	1	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	5	
White-necked Petrel		
Kermadec Petrel	7	light
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	6	
Bulwer's Petrel		
Leach's Storm Petrel	2	
Red-tailed Tropicbird	4	1 adl
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	12	
Gray-backed Tern		
Common Noddy Tern		Shear-pet - 39
Fairy Tern	2	Storm Pet - 5
Pomarine Jaeger		Tropicbird - 4
White-winged Petrel	13	Tern - 14
Murphy's Petrel	6	Phalarope - 1
Red Phalarope	1	
Shear Pet.		
Storm Pet sp	1	
WRSP	2	
Pterodroma sp	1	
		Total Birds 63
		Total Sightings
		Total Flocks 2/52
		Total Species 11

Location

Observer

Date 6 March

Time to

Weather

Miles 77

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	/	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	/	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		Shear-Pet - /
Ruddy Turnstone		Tropicbird - /
Sooty Tern		Phalarope - 4
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
R. Phalarope	4	
		Total Birds 6
		Total Sightings
		Total Flocks 0
		Total Species 3

Location

Observer

Date 7 March

Time

to

Weather

Miles 46

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	2	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird	4	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		Shear-Pet-4
Common Noddy Tern		Tropicbird-4
Fairy Tern		
Pomarine Jaeger		
<i>Pterodroma sp</i>	1	
		Total Birds 8
		Total Sightings
		Total Flocks 0
		Total Species 3

B/L in 1.000

Location

Observer

Date 8 March

Time

to

Weather

Miles 109

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	7	
Bulwer's Petrel		
Leach's Storm Petrel	4	
Red-tailed Tropicbird	7	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	70	
Gray-backed Tern		
Common Noddy Tern		Shear-Pet - 14
Fairy Tern	1	Storm-Pet - 9
Pomarine Jaeger	6	Tropicbird - 7
Shear-Pet	6	Tern - 71
WRSP	5	Jaeger - 8
Pale-foot	1	
Long-tailed Jaeger	2	
		Total Birds 109
		Total Sightings
		Total Flocks 1/76
		Total Species 8

10 march

Birds/Lm = .032

White-throated S. Petrel 1

Shear-Pet - 1

RTTB - 1

Total = 3

$$B/L_m = 1.320$$

Location

Observer

Date 11 March

Time

to

Weather

Miles

Hours

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	2	
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	90	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
White-winged Petrel	1	Shear-Pet - 4
Aterodroma sp	1	STorm Pet-5
WR SP	4	Tern - 90
		Total Birds 99
		Total Sightings
		Total Flocks 3/90
		Total Species 4

12 March
Diurnal

B./Lm = .326

15 Leach's

1 Red Phalarope

16 birds

1 flock / 5 birds

2 species

to

$$B/Lm = -959$$
[illegible]

to

[illegible]

16 March

B./Lm = .735

Wedgetail — 1
Puffinussp — 1

Kermadec — 1
JFP — 2
Cook's — 2
Pterodroma — 1
Leach's — 10
WRSP — 8
WHSP — 2
RTTB — 1

Sooty Tern — 25

Red Phalarope — 9
Parasitic Jaeger

Jaeger — 1
Shear-Pet — 8
Storm-Pet — 20
Tropicbird — 1
Tern — 25
Phalarope — 9
Total — 64
Flocks — 2/25

17 March
miles - 41
B/LM - 8.328

Wedgetail — 239
Tahiti Petrel — 1
Kermadec Petrel — 1
Juan Fernandez Petrel — 5
Dark-rump Petrel — 2

Leach's Storm Petrel — 32
WRSPSP — 12

Red-tailed Tropicbird — 2

Brown Booby — 1

Red Phalarope — 2

Sooty Tern — 235

Parasitic Jaeger — 1

Jaeger — 1
Shear-Pet — 248
Storm Pet — 44
Tropicbird — 2
Booby — 1
Phalarope — 2
Tern — 235

Total birds — 533

Total flocks — 10/450

18 March

B. km = 968

Townsend 4

WRSP 1

Least 3

Leach 69

RTTB 7

RFB 1 imm

BFB 1 Ad

BFootB 1 Ad

R. Phalarope 4

Shear-Pet 4

Storm-Pet 73

Tropicbird 7

Booby 3

Phalarope 4

Total Birds 91
Total Flocks 4/30
Total Species 8

19 March

B/Lm = 3.344

Townsend - 50

Leachs - 21
WRSP - 5

RTTB - 1
RTB - 2 Ad light
BFB - 150

Sooty Tern - 22
R. Phalarope - 4
Pom Jaeger - 1

Shear Pet - 50
Storm Pet - 26
Tropic bird - 1
Booby - 3
Tern - 22
Phalarope - 4
Jaeger - 1

total Birds - 107
Total flocks - 2/67
total species - 8

20 March

B/Lm = 1.026

Townsend - 29

Leach's - 2
WRSP - 1

BFB - 2
RFB - 6

Shore Pet - 29
Storm Pet - 3
Booby - 8

Total Birds - 40
Flocks - 0
Species - 4

21 March

B/Lm = 1.455

Townsend - 27

Leach's - 3

R. Phalarope - 2

Shear Pet - 27

Storm Pet - 3

Phalarope - 2

Total Birds - 32

Flocks - 0

Species - 3

22 March

B/Lm = .359

Cook's Pet - 2

Leachs - 9

Mag. Frigate - 2

R. Phalarope - 1

Shear Pet - 2

Storm Pet - 9

Frigate - 2

Phalarope - 1

Total birds - 14

Flocks - 0

Species - 4

Bulmer
1966

Journal

July 5. Left Honolulu 1600. Species seen at sea Wedgetail Shearwater (light phase), Sooty Tern, Noddy tern, and Red-footed Booby. All seemed to be heading N.W. toward Oahu.

July 6. 2 imm. Bonin Island Petrels sitting on water 0800. Wedgetails still light phase. Newell's Shearwater common (12). Obvious white flanks like Violet-green Swallows. Faint Tern-like Petrels (*Pterodroma externa*) and White-necked Petrels (" ") observed. White-necked have more black underwing, and contrasting black cap, white neck and greyish back. T.F. may show white neck but not black cap.

One apparent *Puffinus griseus*. Bonin Island? and Black-winged Petrel (*Pterodroma hypoleuca*) present. *Bulweria bulweria* observed closely. RTTB + WTTB present. Birds without apparent tail were RTTB, while white tails showed up at distance.

Sooty terns mostly in small flocks, 10-20, flying high and obvious.

July 7 Wedgetails turning mostly dark phase. Faint Tern-like and Black-winged Petrel scattered throughout day. Activity seems to be early morning and late afternoon, with slowest part from 1500 to 1700. Sooty Terns still in small flocks. One ^{sub adult} sooty flew over bow. A single bird with dark grey below. Both tropic birds still present. Usually attracted to ship.

July 8 Wedgetails 42 dark, 1 light. T.F. and B.W. still regular birds all day long 135 F + 22 BWP. 1 RTTB and 1 Fairy Tern. 140 Sooty Terns.

Bulmer
1966

Journal

15 July 1966. Two WRSP. Both flew nighthawk-like. One collected - Leach's Petrel. One all dark large Pterodroma with white flashes in underwing primaries. (dark phase Kermadec?)

16 July; Squall hit Hawland Is. at night so I decided to make a shorebird count to compare with the one on the 14th. Only 2 non-breeding plumaged golden plovers were observed (one collected). One non-breeding plumage Wandering Tattler and one non-breeding plumaged ruddy turnstone were banded. The squall evidently blew most shorebirds off the island and brought in the turnstone. Noddy terns were also taking, but they probably are from Baker and just roost on Hawland during midday.

17 July At sea, four large feeding flocks, several individuals Pterodroma externa and hypoleuca. 5 or 6 Leach's petrels and Naseofregata. The white-throated storm petrel flew with little flapping, ~~and~~ wings stretched horizontally, using air currents over the waves, swooping up at each crest and plucking food out of the crest with its bill. I counted six consecutive waves the it snapped food out of at the height of its swoop. The second bird fed with a Leach's Petrel for 35 min, both birds staying off and in front of the ship (out of gun range). ~~But~~ the tail of Naseofregata is quite distinctive.

Island

3 Aug. Swain's Island. Landed 8:00 AM. Surveyed island until 11:30 AM. Village at landing. Road to Jennings house runs through forest between ocean and lagoon. Jennings house about $\frac{1}{2}$ way around island. Vegetation thick, several trees plus coconut palms. Tree ferns, ground ferns etc.

Blue-Tailed Skink very abundant. found in every pile of coconuts and palm fronds, also in grass and climbing on low vegetation.

Large Brown skink? collected climbing on trees, sunning themselves in the open.

Rattus. common and not shy. Fed on coconuts opened and left in large piles. Climbed readily and were observed 20' up in palms and breadfruit trees. Fights caused squealing.

Golden Plover; - 7 found on trail in forest. fairly tame still no ad. plumaged birds. Possibly feeding on Blue-tailed skinks.

W. Tattler present along beach.

Red Heron - 4 observed, tame dark phase, in grassy areas along lagoon.

New Zealand Cuckoo - common. 4 observed. all in trees about 20' high. Bird looked like 7 sparrows hawk but flew like cuckoo. Bird would fly to higher coconut palms and work to the opposite side of tree before flying off to prevent observation and following. Typical sneaky cuckoo behavior.

Most observations were a result of seeing flying birds. One bird was "squeaked in" to about 15 feet where it hid behind a leaf and peered over with only head visible. Other birds apparently new? was there and did not investigate squeaking. estimated pop. 50.

Fairy Terns, Common Noddy + Haw. Noddy present in small numbers. Mosquitoes + Fly Thicks.

W. Bulmer
1966

Journal

Jarvis Island. Arrived Aug 7. Island very dry. Vegetation sparse and low. Old lagoon dry with salax covering it. Cool waters surrounding island 78°F . 20 miles away 87°F large concentrations of feeding birds, porpoises and turtles. Green seaweed covered reef. Landing easy. RTTB nesting all over, even in open ground, all stages of breeding. pop. 4000 per. Sooty Tern in 2 colonies. one about 500,000 birds the second about 10,000. Mostly large chicks, only about 15 eggs being incubated. All nesting in tall grass, 1' in height. Chicks seem to need grass for protection from heat. Banded 50,000 birds. Grey-back Tern - small colony in lagoon 25 per. Fairy Tern - 2 per. not nesting B.P. feathered. B.G. Noddy - 4 or 5 birds resting in lagoon at night. L. Frigate - 7000 birds 2500 nest on N. 1000 S

G. Frigate - 1000 birds 250 nests

B. F. Booby - Large pop. ⁸⁰⁰⁰ spaced all over Is.

R. F. Booby - Med. pop. 2500 nesting in dead bushes $\frac{1}{2}$ ' from ground and on ground.

Intermediate phase. L. Huber found bird with dull red feet and all brown tail on egg

B. Booby - 400 birds - 18 nest R. Clapp

Wedge Tail - 1 dark phase flying in sooty colony at 1600. several seen offshore. probably small nesting colony.

Naso Fregatta. 1 Taken aboard ship at night. 2 seen after leaving island. probably small nesting colony.

Cats - pop. 20

Mice - pop. Very high

Geckos - common

Skinks - not observed

W. Bulmer
1966

5

Journal

Jarvis Is. (cont.)

Shore birds very low - 5 G. Plovers, 3 W. Tattlers
departed 0700 Aug. 10.

W. Bulmer
1966

Journal

Hawland Island Aug 14

Arrived 0700 and set up camp with R. Chandler. 1000 went out to check Sooty Tern colony. Tribulus grass and other plants were very green and had grown considerably since last month. The sooty colony was still going strong with about 10,000 Ad flying around and 20,000 chicks and flying Imm. Tribulus had completely overgrown all parts of the colony. No place larger than 6 sq ft. was left open. Tribulus was about 10" high but had little effect on the Sooty Terns. Blue streamered chicks, flying immatures, and adults. One small section of eggs (150) and one large section of 1000 eggs were found. The growing Tribulus did not appear to effect the egg laying and incubation.

At 0600 the number of adults had increased to about 100,000. By 10,00 it was probably 200,000.

Swirls of 5000 thousand birds were found over the light house and at the end of the island. These birds are possibly getting ready to lay eggs in the colony.

Pseudorca

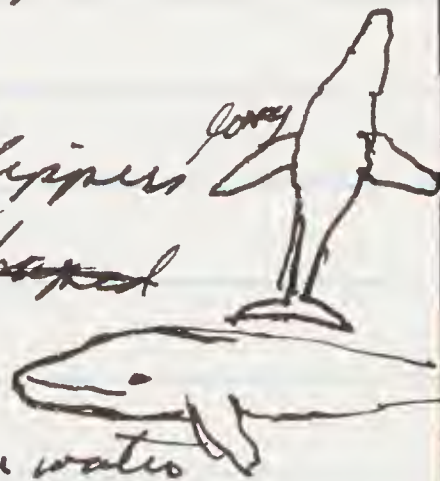
21 Sept.

Chased a school of Pilot Whales and found some false killer whales that separated from the Pilot Whales. One individual played beneath the bow like a porpoise for about 10 minutes, surfacing only rarely.

Description. about 15' in length, flippers

Head was not bottle nosed, but ~~shaped~~ rounded, gradually tapering off.

Color - light grey, appearing olive under water
no call was heard.



Stenella sp.

Sept. 19

Four small dolphins were observed out at sea.
Description. Uniform olive-grey, 6' length. long slender
beak. Similar in size and shape to *S. rosenventris*
but apparently without 2 tone pattern. Only
4 and not a large school like *S. rosenventris*.

Bulmer
1966

Species accounts

Pterodroma neglecta

21 Oct

One light phase bird flew over about 1015. Forehead and underparts completely white. Crown, neck, and back light grey. Underwing dark with conspicuous white patches at wrist. Patches were not oval but present shaped like a skua.

General shape and size like wedgetail, with coloration like Juan Fernandez. Wings slender and long with a slight bend at the wrist, not as broad or straight like *P. externa*.

5° N. Sept.

Description: dark brown above. Brown extending down to chest below, very similar to ~~Tatienian~~ *P. rostrata*.

White lower chest and abdomen. Underwing dark with oval white patch at wrist. A close range white patch shows through dorsal side of wing at bases of primaries.

General appearance close to wedgetail with some brown color.

Pterodroma leucoptera

- ① Sic. #14 - 27 July = Description: W pattern on wings formed by dark primaries, dark secondary coverts, and dark lower back. Light grey back and neck contrasting with black cap that extends below the eye, and black sides of neck forming an incomplete chest band. Under wing white without black borders. Tail and rump grey. ~~Head~~ distal $\frac{1}{3}$ of feet blue, proximal $\frac{2}{3}$ of feet black.

Behavior: Observed singly in warm water from S. grid, S to Samoa and east to Jarvis Is.

- ② Sic. #15 - 5° N. One bird followed the ship for 3 hrs, feeding out of range off the low. fits above description except for dark border under wing like Black-winged petrel. The "W" on back, black cap, and dark chest were clearly observed by persons aboard ship.

- ③ S. Grid off Howland Is. 20 Sept

A bird coll. by F. Smith field #24 was observed from ship and chased until coll.

Description: Sooty black above with faint "W" on wing sooty grey below except on white throat. Under wing dark grey to black with a white streak along anterior side of humerus. Blue feet, small slender bill.

Comment: Alexander describes this bird as P.I. being along with the birds described above. This form is noticeably smaller, and smaller billed birds being drastically differently colored. It may represent a dark phase Pterodroma brevipes from a different pop. on a different island.

W. Palmer
1966

Gardner

Catalogue

- 5943 924 ♀ (10x5mm) largest ova 1x1 stomach coll. Heavy Body molt
♀ (8x4mm) granular Heavy yellow fat
5947 925 Erolia acuminata " " "
♂ (3x2mm)
5948 926 Erolia acuminata
~~6483~~ ~~927~~
- 6483 927 Anous stolidus S. mod fat Brood patch
♂ (8x3mm) L.T.
6471 928 Anous stolidus mod fat Brood patch
♂ L.T. 7x3mm R.T. 6x4mm
6473 929 Anous stolidus S mod fat Brood patch
♀ (8x5mm) largest ova 2x2mm oviducts enlarged
6470 930 Anous stolidus S mod fat Brood patch
♀ (14x8mm) largest ova 3x3mm oviducts enlarged
6513 931 Anous stolidus S mod fat Brood patch
♀ (10x5mm) largest ova 1x1mm oviducts enlarged
6478 932 Anous stolidus S mod fat Brood patch

- 26128 933 Sula dactyla S No fat
♂ L.T. 6x4mm
26126 934 Sula dactyla S fat

Pacific Ocean

- 2271 935 Pterodroma hypoleuca nigripennis coll. by L. Huber
10 July 1966
- 2372 936 Oceanodroma leucorhoa 40.5g Light fat coll. R. Crossin
♂ (L.T. 18x5mm R.T. 18x5mm)
2374 937 Pterodroma h. nigripennis 154g mod fat " L. Huber
♂ (L.T. 22x1mm R.T. 2x1mm)
- ~~2376~~ ~~938~~ 0°27'S 175°57'W 22 July 1966
♂ (4x2mm)
2376 938 Sterna fuscata Skeleton 192g mod fat coll. K. Balcomb
0°27'N 175°29'W 17 July 1966
♀ 10x8mm largest ova 2x2
- 2325 939 Fregata ariel Brood patch mod fat S coll. R. Chandler
Gardner Island 25 July 1966
♀ (11x4mm) 2 ova 1x1mm oviducts straight
6589 940 Pluvialis dominica 126g
legs+feet light blue, bill black body molt

W. Bulmer
1966

Gardner
Swains

Catalogue

~~6588~~ ~~941~~
6588 941

Gardner Is. 26 July 1966

♀ (10x4mm) Largest ovum 1x1mm

Pluvialis dominica 107g Light fat

legs feet - Light blue, bill - black

general body molt

Gardner Island

25 July 1966

♂ (3x2mm)

6596

942

Pluvialis dominica

112g no fat

S coll. D. Pearson

bill - black, feet + legs pale blue.

body molt p-i-4 ad 5 1/4 6 1/3 7 1/4

Swains Island

3 Aug 1966

6610

943

Rattus

E + S

286-160-26-16-67g

6611

944

Rattus

E + S

300-162-30-17-73g

8°47'51" 172°51'W

27 July 1966

Pacific Ocean

♂ (19x5mm)

2382

945

Phaethon lepturus

light fat

S

coll. R. Chandler

10°31'5 170°33'W

3 Aug 1966

Pacific Ocean

♂ (2x1mm)

2384

946

Pterodroma cooki

141g

E.

S.

coll. D. Pearson

gape - blue-grey to flesh legs blue distal 2/3 foot black, proximal 1/3 foot blue
iris dark brown bill - black claws black body molt

Gardner Is.

26 July

6600

947

Fregata ariel 679g no fat

S. coll. R.S. Crossin

6599

948

Fregata ariel 648g slight fat

S coll. R.S. Crossin

Gardner Island

25 July

6573

949

♀ (3x2mm) mod. fat
Anous stolidus

150g

S coll. L. Huber

0°50'N, 176°18'W

17 July

2298

950

♂ (3x2mm)

mod fat

Pterodroma externa 460g

S coll. R. Chandler

Gardner Island

25 July

6574

951

♂ (2x1mm) mod fat no brood patch
Anous stolidus 160gm.

S coll. R.S. Crossin

off Baker I

21 July 1966

0°17'N 176°31'W

2360

952

♂ (6x3mm) brood patch

Sterna fuscata slight fat

S. coll. R.S. Crossin

~~953~~ banded 843-35326

2359

953

♀ (11x5mm) Largest ovum 1mm brood patch

Sterna fuscata little fat

S. coll. R.S. Crossin

953-18163

banded 953-18163

streamered

Bulmer, W
1966

Catalogue

0°51'N, 175°37'W, Pacific Ocean

16 July 1966

2297

954

♂ (1 x 0.5) no brood patch
Oceanodroma leucorhoa no fat 30gms.
p1-5 (old), p6 (1/5), p7-10 (new) body molt
s1-4 (old), s5 (new), s6-10 (old), s11 (1/3), s12 (old)

0°17'N, 176°31'W Pacific Ocean

21 July 1966

2373

955

♂ (1 x 0.5 mm) no brood patch 61gms fat
Oceanodroma leucorhoa 42.5g S. coll. K. Balcomb
p1-5 (old), p6 (1/4), p7-10 (new)
body molt

6 Aug. 1966

2386

956

♂ (2 x 1 mm) no brood patch mod. fat 26gms
Pterodroma alba S. coll. L. Huber
bill-black legs + proximal 1/3 foot-blueish flesh
iris-dark brown distal 2/3 foot-black

Gardner Island Pacific Ocean

26 July

6594

957

♀ (10 x 5 mm) largest ovum 1mm.
oviduct slightly enlarged + curled
Heteroscelus incanum 106g slight white fat S. coll. R.S. Crossin
legs + feet greenish yellow
body molt bill-dark grey to light grey posterior lower mandible

6595

958

♂ (3 x 2 mm)
Heteroscelus incanum 120g heavy white fat S. coll. R.S. Crossin
legs + feet greenish yellow
body molt bill-dark grey to light grey posterior lower mandible

Swains Island, Pacific Ocean

3 Aug.

6601

959

♂ (3 x 2 mm)
Heteroscelus incanum 148g heavy white fat S. coll. R.S. Crossin
legs + feet greenish yellow
bill-dark grey to light grey posterior lower mandible

6602

960

♀ (7 x 3 mm) granular
Heteroscelus incanum 133g heavy white fat S. coll. R.S. Crossin
legs + feet greenish yellow
bill-dark grey to light grey posterior lower mandible

Jarvis Is. Pacific Ocean

7 Aug

6643

961

♂ (9 x 4 mm)
Phaethon rubricata 745gms slight fat S. coll. R.S. Crossin

Jarvis Is. Pacific Ocean

7 Aug

6638

962

♂ (6 x 4 mm)
Gygis alba 96gms no fat S. coll. R.S. Crossin

Bulmer, W
1966

Catalogue

Howland Is. Pacific Ocean

13 July 1966

6528 963 ♂ (3x1mm) Pluvialis dominica body molt 132gms heavy fat S

Gardner Island Pacific Ocean

25 July 1966

6592 964 ♂ (2x1mm) Arenaria interpres 93g. light fat S coll. R.S. Crossin

off shore Jarvis Is., Pacific Ocean

8 Aug

2388 965 ♂ (6x4mm) broad patch Nasofregata albigularis 61gm. mod. fat S
bill-black feet + legs black
no molt

Swains Is., Pacific Ocean

3 Aug

6605 966 ♂ (3x1mm) Pluvialis dominica 134g heavy fat S coll. R. Clapp
R. secondaries 1 (pf) 2-4 (old) 5 (1/2) 6-9 (old) 10 (2/3) L.S. 1 (pf) 2-8 (old) 9 (2/3) 10 (new)
Primaries 10-5 (old) 4 (pf) 3 (1/2) 2-1 (old) R.R. 1-3 (old) 4 (1/2) 5 (pf) 6 (new)
♂ (2x1mm)

6607 967 Pluvialis dominica 139gms heavy fat S coll. R. Clapp
body molt - Left Primaries 10-7 (old) 6 (3/4) 5-1 (new) Right same
L. secondaries 1 (new) 2 (sh) 3 (drop) 4-9 (old) 9 (3/4) 10-11 (new) 12 (old)
R. secondaries 1 (new) 2 (sh) 4-9 (old) 9 (2/3) 10-11 (new) 12 (sh) 13-14 (old)

6608 968 ♂ (4x2mm) Eudynamis taitensis 119gms light fat S coll. R.S. Crossin
gape flesh legs + feet flesh + toenails black R. secondaries 1 (new) 2 (4/5) 3 (new)
bill - upper mandible dark grey 4 (missing) 5 (1/2) 6-8 (new) left same
lower mandible light grey
R. Retrises 1 (old) 2 (3/4) 3-5 (new) Left same
R. Primaries 1-3 (new) 4 (1/2) 5 (new) 6 (1/2) 7 (1/2) 8-9 (new) 10 (1/3) left same

0°20'S 160°47'W, Pacific Ocean

10 Aug. 1966
no molt

2389 969 ♂ (1x0.5mm) Oceanodroma leucorhoa 36.5g light fat S. coll. R.S. Crossin

Baker Is. Pacific Ocean

14 Aug 1966

6679 970 ♂ (2x1mm) Arenaria interpres 104g heavy fat S coll. D. Pearson
Body molt Retrises - L (1/2) rest new secondaries - all old
R. Primaries 1-4 (new) 3 (1/2) 4 (pf) 6-10 (old) left same

Howland Is. Pacific Ocean

15 Aug 1966

6683 971 ♀ (9x5mm) granular Arenaria interpres 84.5g no fat S. coll. D. Pearson

Bulmer
1966

Catalogue

Lisianski Island, Pacific Ocean

19 June

- 6501 972 ♀ (8x5mm) B.P. refeathering L. Ovum 2mm *Anous minutus* 90.8gms slight fat Retrices 5 (1/5) L+R same Secondarys none R. P 1-1/2, 2 (1/3) 3 (P) 4-10 (all) Coll. F. Smith
6502 973 ♂ (6x4mm) Brood patch bare *Anous minutus* 124.2gms no molt mod fat legs orange-brown, nails black S. Coll. F. Smith

974 *Anous minutus*

Laysan Is Pacific Ocean

15 June 1966

- 6200 975 ♀ (10x5mm) B.P. bare L. Ovum 2mm *Anous minutus* 161gms slight fat no molt S
6194 976 ♂ (4x2mm) B.P. refeathering *Anous minutus* 111gms slight fat R. P 1-3 (n), 4 (1/2), 5 (1/5), 6-10 (a) L. same secondarys all in Retrices L+R 4 (3/2) rest in S.
6186 977 ♂ (8x6mm) B.P. bare *Anous stolidus* 192gms slight fat S.
6178 978 ♂ (6x4mm) B.P. bare *Anous stolidus* 191gms slight fat S.
6190 979 ♂ (8x6mm) B.P. bare *Anous stolidus* 223gm slight fat S
6185 980 ♀ (12x6mm) L. Ovum 2mm B.P. Bare *Anous stolidus* 167gms slight fat S
6180 981 ♀ (10x6mm) L. Ovum 3mm B.P. bare *Anous stolidus* 160gms slight fat S
6191 982 ♂ (8x6mm) B.P. bare *Anous stolidus* 202gms slight fat S
6179 983 ♂ (6x4mm) B.P. bare *Anous stolidus* 173gms slight fat S
6189 984 ♂ (6x4mm) B.P. bare *Anous stolidus* 195gms slight fat S

14°27'N 171°37'W Pacific Ocean

11 Sept. 1966

- 2419 985 ♂ (2x1mm) no molt *Arenaria interpres* 81.4gms mod fat Es 15-3 S coll. L. Huber

8°13'N 173°04'W Pacific Ocean

13 Sept. 1966

- 2425 986 ♂ (3x2mm) no molt *Numenius tahitiensis* 340gms mod. white fat Es 15-9 S coll. R. Heiden
Iris - dark brown nails - black
bill - upper mand. - dark grey legs + feet - blue grey
bill - lower " - light grey

Baker Island, Pacific Ocean

18 Sept. 1966

- 6717 987 ♂ (2x1mm) no molt *Chadrius* light fat 32.3gm Es 15-29 S. coll. P. Woodward
bill - black with base of L. mandible yellow
legs + feet - yellowish-green claws black

0436

W. Bulmer
1966

Catalog

Howland Island, Phoenix Islands, Pacific Ocean

16 Sept. 1966

6698

988

♀ (12x5mm) ~~Bubul~~ ^{Bubul} ~~1618~~ ¹⁶¹⁸

309gms slight fat

S.

legs + feet - black

Iris - orange

bill - yellow orange

bare skin around eye - greenish-yellow with yellow eye-ring

0° 52' N 176° 36' W Pacific Ocean

20 Sept

2452

989

♂ (6x3mm) no brood patch Iris - black, legs + feet black

Sterna fuscata 171gms slight fat

S. coll. F. Smith

0° 46' N 176° 24' W Pacific Ocean

23 Sept. 1966

2473

990

♂ (15x10mm) no molt beak - dark grey legs - black outside, pink inside Iris - brown
Puffinus tenuirostris 674gms very heavy fat S. coll. F. Smith

Enderbury Island Pacific Ocean

26 Sept. 1966

6740

991

♂ (3x2mm) no molt feet + legs - greenish yellow
Erolia melanotos 53.7gms slight fat S. coll. F. Smith

6726

992

Gygis alba 87.4gms slight fat S.
bill - black to purple at base Iris - black L. P1-6(n) P7(1/2) P8-10(o)
legs + feet - blue with white webbing R P1-8(n), P7(2/3) P8-10(o)

Hull Is., Pacific Ocean

7 Oct. 1966.

6756

993

♂ (2x1mm) Procelosterna cerulea 47gm slight fat S. coll. F. Smith
P1-5(n) P6(1/2), P7-10(o) left same
secondaries old R1(o) R2-6(n)

Baker Island, Pacific Ocean

13 Oct. 1966

6768

994

♀ (11x5mm) granular oviduct 3mm + coiled
Limosa lapponica 214gms mod fat
Retrices L1(o), L2-3(sh) L4-6(o) Iris - dark brown legs + feet - black
bill - proximal 1/2 flesh with dark brown ridge distal 1/2 black

6771

995

♀ (7x3mm) granular legs - greenish-yellow bill - dark grey with light base of lower mandible
Erolia acuminata Ad 67gms heavy white fat S.

6770

996

♀ (6x3mm) granular legs - greenish yellow bill - dark grey with light base of lower mandible
Erolia acuminata Ad 69gms heavy white fat S.

1966

Journal

Why is it that on certain days with certain type seas that one can absolutely predict the species and abundance of these species when it may be totally different from those observed the day before? I am here referring to the seas with small and white caps of 6 or more as opposed to the calmer seas. In the rough seas of this area one is almost assured of *Pt. externa* and *hypoleuca* being the dominant forms while calmer seas seem to lack these but contain *RTTB* and *G. Frigate* etc. Is this due to the ships movement through different, relatively stable areas with one day, or is it due to the birds movement keeping them within a stormy area or avoiding them? Many are the northern bird is composed of two distinct habitats that of course overlap adding confusion to the obvious. These two habitats will be referred to as a "temperate zone" characterized by N.E. Trade winds, and abundance of rain squalls, and high seas, and a "equatorial zone" characterized by calm seas, clear and hot weather. Within these two habitats tropical nesting birds (occasional) like *Tropicbirds*, *Terns*, *frigate*, *Pt. leucophaea*, *Pt. alba*, and *Pt. neglecta* are most frequently observed in the "equatorial zone". Temperate nesting species like *Pt. externa*, *Pt. hypoleuca*, *Pt. phaeopygia*, *batoids*, *L. puffinus* etc. inhabit the "temperate zone".

I realize, of course, the chance observation of *Pterodroma* greatly enhanced in windy weather, but totally daily observations lead me to believe that this phenomenon is not due to the possibility of *Pterodroma* being airborne sitting. If this were the case why the lack of *Pterodroma* around violent rain squalls that pass through the "equatorial zone".

The reader of these notes must realize that the above theory has come from the "top of my head" after a virtually sleepless night, and without reviewing of the actual data.

1966

Journal

On Sooty-Slenderbills

The argument on the reliability of the identification of Sooty or Slenderbill Shearwater has stimulated much debate among the competent personnel of the Pacific Program.

The notes here recorded are drawn from three months, and some 8,000 to 10,000 observations of Sooty-Slenderbill under every conceivable field condition.

The "typical" Slenderbill Shearwater appears slim bodied, long winged, travels in compact flocks and has dark underwings. The underwing color may appear and actually be silvery grey. The reflection of light off the water gives the bird a light underwing color. A whole flock may appear light underwinged and as they cross the sea the underwing color can change to dark. This phenomenon appears to add the most confusion to the observer using underwing pattern as an identification species.

As a species, Sooty Shearwater appears very much darker in the water than large chest. The underwing is often white with a dark border on the inner side. In poor conditions cannot be mistaken for the all over silvery look of the slenderbills. The important difference between "light" and "dark" underwing must be realized. They appear to fly slower, glide more and make deeper wing strokes than slenderbills. On calm conditions, at me say calm deep blue seas under sunny skies, slenderbills rise and are higher off the water than sooties. Under the flight of the sooty shearwater under these conditions they appear so slow and without arcing high off the water that they can almost be mistaken for wedgetails.

Early in the migration season vast numbers of slenderbills move through in large flocks. Less than 1% appeared to be sooty shearwater and the

usually came from individual dooters
not in the flocks. The vast majority of the
birds at this time were definitely slenderbills, and
it cannot be said that the shearwaters are dooters.

A couple weeks later sooty shearwaters were
found common off Samoa. These birds flew
in small flocks, often strung out into a line
and were never as abundant as slenderbills
in the S. Gul. The difference in flight and
flocking behavior at this time appeared so
readily identifiable that I wonder where the
confusion arose. Truly the wondering of sooty
shearwaters on a sunny day appears all
dark. The reflection of light off the water
makes an arising bird appear uniformly dark
underwinged but the body size in ratio to wing
width, and different flights was enough to
distinguish between the species.

During November both species were migrating
through the Northern Birds in equal numbers. When
single birds came into view their flight was
usually enough to identify them. But, when mixed
flocks passed close enough the difficulty arose.
It was apparent that sooty shearwaters were
flying faster and arising higher when they were
in company of slenderbills. Indeed the sooter
appeared straining to keep up with the swifter,
smaller species. The characteristic shape and
body size must be used first, and then underwing
color to identify members of these mixed flocks.

At this time of the year all flocks must be
labeled sooty-slenderbills as both species are
present and the rate of travel makes counting of
each species very difficult.

The interesting observation on Nov 12, was
three separate groups of sooty shearwaters feeding.
One flock of 12 were observed on the water, plucking
these birds under, feeding on small fish.

Pterodroma phaeopygia

0720 Nov. 7

Three birds flying together, coming close to ship.

Description: General size and shape wedgetail like (slimmer appearance than Pt. externa). Upper part uniform dark brownish-grey with darker primaries, secondaries, and tail. White forehead, and black ear patch. Under parts pure white, no partial collar like wedgetail. Underwing with wide dark border like wedgetail.

Nov. 16

One individual evidently flew from under the bow. The bird was uniformly dark brown above with darker edging of feathers giving it a scaled appearance. The Primaries and secondaries, and tail were darker brown than the rest of the dorsal surface. The white forehead to eye level and darker ear patch was the major difference from a wedgetail, although the bird appeared smaller. The underparts were clear white. The under wing ~~was~~ was white with a wide (2") dark border, perhaps more evenly cut than a wedgetail.

Nov. 26

One individual flew close to ship accompanied by 3 wedgetails. At once the white forehead made the bird look drastically different from the wedgetails. In fact it almost appeared white-headed with a dark "ear" patch.

Pterodroma sp.

2 Dec 1966

One Pterodroma observed in a flock of Pt. externa.

Description - Uniform grey-brown, almost cacky colored. Underwing grey-brown reflecting slight silvery like a slender underwing. In good light the underwing was completely brown without pattern. The bird was observed close and had no visible pattern.

General shape and size was slightly smaller than Pt. externa with slimmer wings. Size was similar to Kermadec petrel but general appearance was different. Most Kermadec have a dark underwing with the light patch at the base of primaries. This individual had a light brown underwing without any markings. Kermadec appear to have a wide wing from long secondaries while the bird had a slender underwing with shorter secondaries.

Flight was typical of Pterodroma in that the bird flapped occasionally and sailed in high arcs turning its completely sideways to the wind.

The bird was not any all dark Puffin since I am quite familiar with all species in that genus and the shape of this bird did not fit any Puffin species.

Believed to be Pt. ultima or Pt. neglecta of slightly different shape and light underwing without markings.

9 Nov.

Pterodroma alba

One bird flew close to the ship in close association with a Kermadec Petrel. Both birds were on the edge of a large feeding flock composed of mostly Pterodroma.

1966

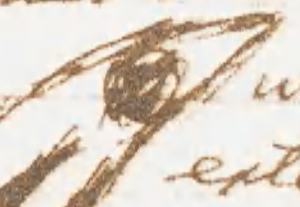
Pterodroma neglecta

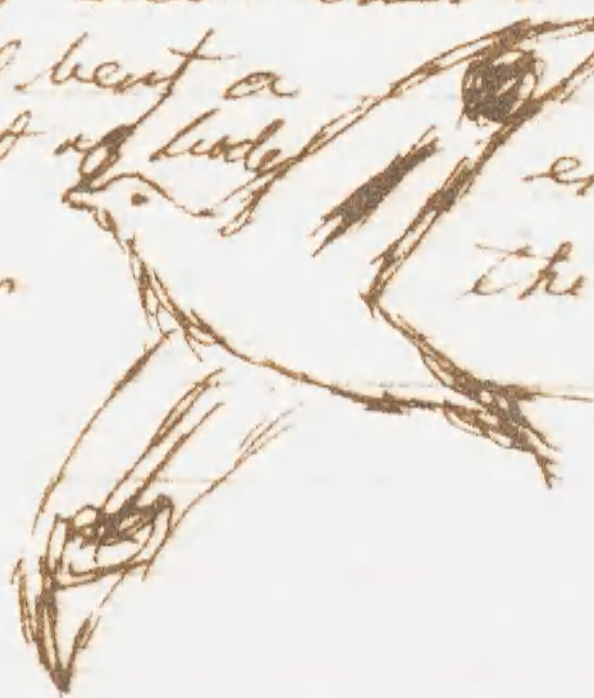
9 Nov.

Two light phase Kermadec's fed within large flocks of Thudroma alba. Both birds had a white forehead and complete white underparts. The fleshy white patch at the base of the primaries make them appear like a light phase adult Laysan Jaeger. In size and shape they are wedgetailed like. The flight is sharp wing stroke and tracing ~~the~~ and is intermediate the flight of wedgetails and Juan Fernandez Petrel.

2 Dec. One individual with a white head extending to upper back. All birds in heavy molt. Quite common in this area.

4 Dec.

A typical Kermadec shaped can now be told from other shearwaters. The birds have a wide winged appearance due to long secondaries with wings set forward and bent a  twist. The posterior part of body extending further from wing than the anterior portion.



Pterodroma externa externa

0730 Nov. 7 2 birds

Description; Typical Juan Fernandez with light grey head, no white collar, uniform light grey

 under wing, pattern dark border about 1" in width dark back mark back and wings. lighter rump and dark tail. White forehead with light grey cap extending below the eye (no black ear patch like *P. phaeopygia*).

Nov. 9

Juan's sea still very abundant. Flock of about 50 birds. ~~observed~~ observed twice today.

Dec.

Very common in the rough seas from to 20 miles east of Johnston. One flock observed sitting on the water in a compact unit. ~~I~~ I believe it was a migratory flock that was resting in the day time. As the ship approached the flock took wing and circled until the ship parted and then they sat down.

P. externa probably migrates at night and sleeps in the day. Both subspecies were present in most flocks with JFP outnumbering (WNP 20-1).

Pterodroma Sp.

Nov. 10

Description; Upperparts dark brown with darker edge of feathers giving it a mottled appearance. Forehead dark brown, primaries dark brown. Underparts white with a brown chest band that may have been complete. Throat appeared white. Underwing dark with a white slash along humerus and a light patch at base of primaries. The

 light patch did not show through above. General appearance wedgetail like. size of Phoenix island petrel. Believed to be *Pterodroma aronijouana haddisi* but could have been a Phoenix Islander in bad molt except for underwing? The bird was not observed long enough, but was close for one fairly good look.

Bulmer
1966

Puffinus bulleri

24 Nov.

1300 at edge of atoll one bird flew under the low.

Description: Black cap to eye level, light grey head and back, wedged tail, light grey wings with a very distinctive upside down black "W" pattern formed by black primaries, secondary coverts, and dark grey mark across lower back. Clear white below. Underwings clear white.

General appearance; exact size, shape and flight of a wedgetail. slowly moving close to the water with long slow wing beats and typical bend in the wing at the wrist. The underwing differs from a wedgetail in lacking the white dark border.

Once the bird is identified as Puffinus and not a Pterodroma there is little doubt as to species identification. This is accomplished by the look of a white forehead.

W. Bulmer
1966

Puffinus ~~caerulescens~~

20 Nov

One bird flew from the water as the ship approached it. Its long narrow wings, short tail and complete chocolate brown color may it readily identifiable.

The flight consisted of long falcon flaps with even graceful glides. This species most clearly resembles a small albatross as it glides on long slender wings that form an arc downward. Wings are held straight without a bend in the wrist.

The white bill is distinctive if observed in good light, but often as with this individual the bill changed from ivory white to dark as the bird changed angles with the sun. In other words the species is quite easily identified without actually seeing the white bill. There is no other large all dark shearwater with the outline of this species known to occur in the central Pacific.

Pterodroma hypoleuca nigriceps

Dec. 2

Coll by B. Harrington

Description - Fresh plumage

Head - slightly mottled light grey forehead with light grey continuing down to upper rump. dark grey eyepatch leaving a white superciliary line from bill to mid eye. dorsal wings; black with silvery grey secondaries + secondary coverts. This produces a black uprider down "W" on wings and back. upper rump black, tail basal $\frac{1}{2}$ light grey, distal $\frac{1}{2}$ black. below; pure white from bill to under tail coverts with the exception of a light grey collar that hardly connects across upper chest under wing.



Pterodroma externa circumdata

21 Nov.

Finally had a good look at a white-masked Petrel today. The bird differed from *P. externa* in having a darker (black) cap starting at eye level and continuing to back of head. The back was grey and a broad (1/2 in) white band separated the black cap from the back. The underwing was white with a small black back mark wrist and elbow. There was no black border to the underwing of this bird.



W. Bulmer
1966

Whale sp.

4 Dec 1966

One small baleen whale about 25-35' in length. Spout of 10 x 15 high, straight up and like a fountain was observed in front of bow, and then alongside of ship 5 min. later. The animal was definitely alone. ~~Part of its back was observed through binoculars and no fin was observed.~~

Probably a Piked Whale

1966

Pterodroma phaeopygia

Dec 12, Northern Grid

One individual was sitting on the with two JFP's. The ship flushed them and the Dark rump flew fairly close to the bow for a short time. The bird was immediately recognized by its uniform dark back and black ear patch. The black border under the wing was about 1/2" wide anteriorly and less distinct posteriorly. Again primaries 4-7 appeared light compared with the rest. The mag. be. molt, but the same area is involved as for birds.

General remarks. - Smaller than JFP with a longer winged appearance like a well-gated. A rich dark brown above with darker retrices, secondaries and primaries, except p 4-7 which appear greyish.